查询MPB125供应商

MPB125 SERIES

Advanced Product Release

DESCRIPTION

The MPB125 series incorporates patented high efficiency circuitry, high power density and active Power Factor Correction (PFC) to meet the requirements of networking and data communications systems, as well as commercial and industrial configurations.

Dual output units deliver a regulated main output plus a second 12V output for fans or other system functions. Multiple output models provide tightly regulated DC power in a variety of configurations. The MPB125 is rated for convection as well as forced-air cooling. Full output power is available with as few as 130 Linear Feet per Minute (LFM) forced-air cooling.

The MPB125 product line is approved to the latest international regulatory standards, and displays the CE Mark.

FEATURES

- High Power Density in Industry Standard 3" x 5" Footprint
- Power Factor Correction (PFC) Meets EN61000-3-2
- Main Output Remote Sense
- Power Good Signals
- CE Marked to Low Voltage Directive
- Input Transient & ESD Compliance to EN61000-4-2/-3/-4/-5

MULTIPLE OUTPUT MODEL SELECTION CHART -

80 Watts Convection Cooling, 125 Watts Forced-Air Cooling

MODEL	OUTPUT VOLTAGE (VOLTS)	MAXIMUM OUTPUT CURRENT (AMPS), 130 LFM (NOTE 2)	TOTAL REGULATION %	RIPPLE & NOISE % pk-pk (NOTE 3)	REGULATION RANGE
MPB125-2005	+5V	25A	±3%	1%	4.85V to 5.15V
	+12V	0.5A	±5%	1%	11.40V to 12.60V
MPB125-2012	+12V	10.5A	±3%	1%	11.64V to 12.36V
	+12V	0.5A	±5%	1%	11.40V to 12.60V
MPB125-2015	+15V	8.3A	±3%	1%	14.54V to 15.45V
	+12V	0.5A	±5%	1%	11.40V to 12.60V
MPB125-2024	+24V	5.2A	±3%	1%	23.28V to 24.72V
	+12V	0.5A	±5%	1%	11.40V to 12.60V
MPB125-2048	+48V	2.6A	±3%	1%	46.56V to 49.44V
	+12V	0.5A	±5%	1%	11.40V to 12.60V
MPB125-3000	+5V	15A	±3%	1%	4.85V to 5.15V
	+12V	5A	±5%	1%	11.40V to 12.60V
	-12V	0.5A	±3%	1%	-11.64V to -12.36V
MPB125-4250 (NOTE 1)	+2.5V	10A (NOTE 4,5)	±3%	1%	2.42V to 2.58V
	+5V	15A (NOTE 4,5)	±3%	1%	4.85V to 5.15V
	+12V	5A	±5%	1%	11.40V to 12.60V
	-12V	0.5A	±3%	1%	-11.64V to -12.36V
MPB125-4350 (NOTE 1)	+3.3V	10A (NOTE 4,5)	±3%	1%	3.20V to 3.40V
	+5V	15A (NOTE 4,5)	±3%	1%	4.85V to 5.15V
	+12V	5A	±5%	1%	11.40V to 12.60V
	-12V	0.5A	±3%	1%	-11.64V to -12.36V

NOTES: 1) Maximum convection output power is 75 watts.
2) Maximum forced-air output power is 125 watts with 130 LFM at 5 CFM.
3) Maximum peak-to-peak noise expressed as a percentage of output voltage, 20 MHz bandwidth.
4) Maximum power of 80 watts from V1 + V2 with 130 LFM at 5 CFM forced-air cooling.
5) Maximum power of 45 watts from V1 + V2 for convection cooling.

NUCLEAR AND MEDICAL APPLICATIONS Power-One products are not authorized for use as critical components in life support systems, equipment used in hazardous environments, or nuclear control systems without the express written consent of the President of Power-One, Inc.

TECHNICAL REVISIONS The appearance of products, including safety agency certifications pictured on labels, may change depending on the date manufactured. Specifications are subject to change without notice.

REV. 08/23/01

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INPUT SPECIFICATIONS

PARAMETER	CONDITIONS/DESCRIPTION	MIN	NOM	MAX	UNITS
Input Voltage- AC	Continuous input range.	90		264	VAC
Input Frequency	AC Input.	47		63	Hz
Brownout Protection	Lowest AC input voltage that regulation is maintained with full rated loads.	90			VAC
Hold-up Time	Over full AC input voltage range at full rated load.	17			mS
Input Current	90 VAC at full rated load.			1.8	ARMS
Input Protection	Non-user serviceable internally located AC input line fuse, 3.15A.				
Inrush Surge Current	Internally limited by thermistor, one cycle, 25° C. 110VAC: 220VAC:			23 46	APK
Power Factor Circuitry	Active PFC meets requirements of EN61000-3-2.				
Operating Frequency	Switching frequency of main transformer.		100		kHz

OUTPUT SPECIFICATIONS

PARAMETER	CONDITIONS/DESCRIPTION	MIN	NOM	MAX	UNITS
Efficiency	Full Load, 230VAC. Varies with distribution of loads among outputs.	75		85	%
Minimum Loads	V1 + V2 + V3.	5			Watts
Ripple and Noise	Full load, 20 MHz bandwidth.	See Model Selection Chart			
Output Power	130 LFM at 5 CFM forced-air cooling. Convection, dual and triple-output models. Convection, four-output models.			125 80 75	Watts
Overshoot /Undershoot	Output voltage overshoot/undershoot at turn-on.			10	%
Regulation	Varies by output. Total regulation includes: line changes from 85-132 VAC or 170-264 VAC, changes in load starting at 20% load and changing to 100% load.	See Model Selection Chart			
Transient Response	Maximum deviation due to a 25% load change with unit at 75% load.		3		%
Turn-on Delay	Time required for initial output voltage stabilization.	0.2		1.5	Sec
Turn-on Rise Time	Time required for output voltage to rise from 10% to 90%.	0.2		20	mS

INTERFACE SIGNALS AND INTERNAL PROTECTION

PARAMETER	CONDITIONS/DESCRIPTION	MIN	NOM	MAX	UNITS
Overvoltage Protection	V1 of dual and triple output models; V1 & V2 outputs of 4-output models.				VDC
	MPB125-4250 (V1)	3.20		4.0	
	MPB125-4350 (V1)	3.67		4.8	
	MPB125-2005, MPB125-3000, MPB125-4X50	5.74		7.0	
	MPB125-2012	13.5		15.5	
	MPB125-2015	17.0		19.0	
	MPB125-2024	27.0		30.7	
	MPB125-2048	50.0		70.0	
Overload Protection	Fully protected against output short circuit. Automatic recovery upon removal of overload condition.				
Remote Sense (Note 1)	Total voltage compensation for cable losses on +Sense. Total voltage compensation for cable losses on -Sense.			200 100	mV
Power Good, Delay High	TTL compatible signal is high if output is within 97% of nominal. Delay after outputs have reached 97%.	100		500	mS
Power Good, AC Fail	TTL compatible signal is low if AC power is interrupted for 16 mS. Power warning before outputs reach 97% of nominal.	1.0			mS

NOTES: 1) -Sense must be connected to output common or load common for proper power supply operation.

SAFETY, REGULATORY, AND EMI SPECIFICATIONS

PARAMETER	CONDITIONS/DESCRIPTION	MIN	NOM	MAX	UNITS
Agency Approvals	UL1950. CSA 22.2 No. 234/950. EN60950 (TÜV).		Approved		
Dielectric Withstand Voltage	AC to chassis. Input to output.	1500 3000			VAC VDC
Electromagnetic Interference	EN55022 Conducted.	B			Class

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SAFETY, REGULATORY, AND EMI SPECIFICATIONS (CONTINUED)

PARAMETER	CONDITIONS/DESCRIPTION	MIN	NOM	MAX	UNITS
Flicker	Per EN61000-3-3.				
Radiated Susceptibility	Per EN61000-4-3.				
EFT/Burst	Per EN61000-4-4.				
Input Transient Protection	Per EN61000-4-5.				
RF Immunity	Per EN61000-4-6.				
Magnetic Fields	Per EN61000-4-8.				
Voltage Dips	Per EN61000-4-11.				
Insulation Resistance	Input to output.		10		MΩ
Leakage Current	Per EN60950 (264 VAC)			1.0	mA

ENVIRONMENTAL SPECIFICATIONS

PARAMETER	CONDITIONS/DESCRIPTION	MIN	NOM	MAX	UNITS
Altitude	Operating Non-Operating			10K 50K	ASL Feet
Operating Temperature	At 100% load:	0		50	°C
Storage Temperature		-40		70	°C
Forced-Air Cooling	Forced-air cooling of 130 LFM at 5 CFM is required for full output power. Air velocity is measured with power supply mounted on 0.375" (9.5mm) standoffs. Airflow direction is from the input section to the output section.				
Temperature Coefficient	0°C to 70°C (after 15 minute warm-up).		±0.02	±0.05	%/°C
Relative Humidity	Non-Condensing.	5		85	%RH
Shock	Operating: 11 ±3mS, 3 axes, Half Sine. Non-operating: 11 ±3mS, 3 axes, Half Sine.			15 30	G
Vibration	Operating: Random vibration, 5-500 Hz, 10 minutes each axis. Non-Operating: Random vibration, 5-500 Hz, 10 minutes each axis.			2.4 4.8	GRMS GRMS

For the Most Up-To-Date Information
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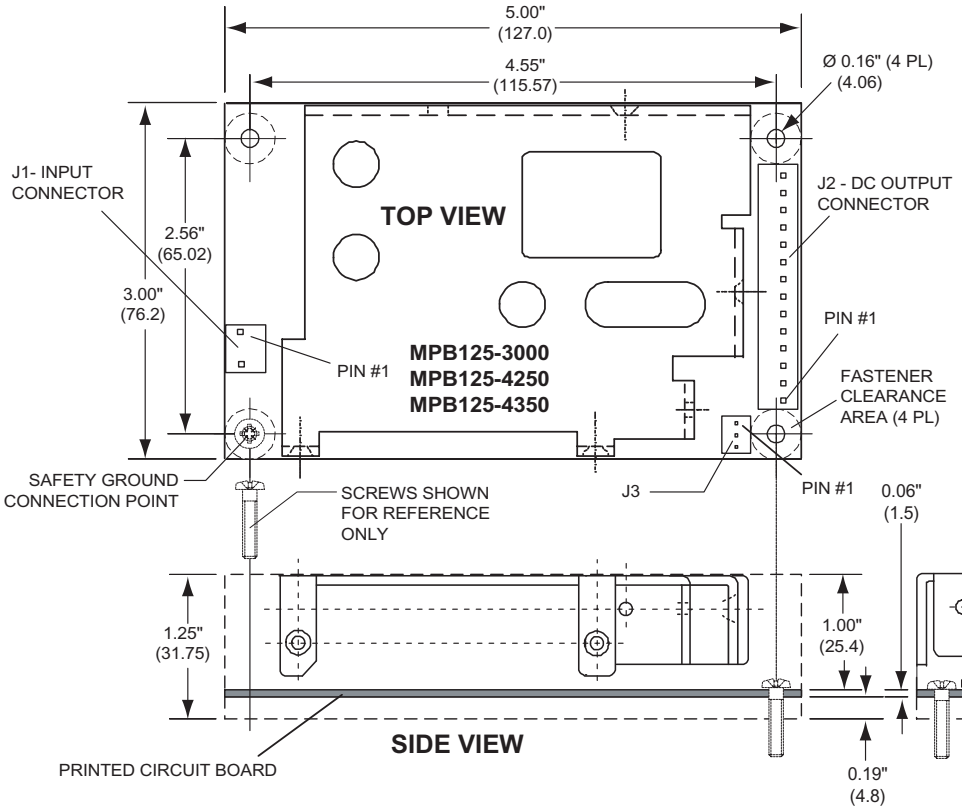


J1 - AC I/P CONN.

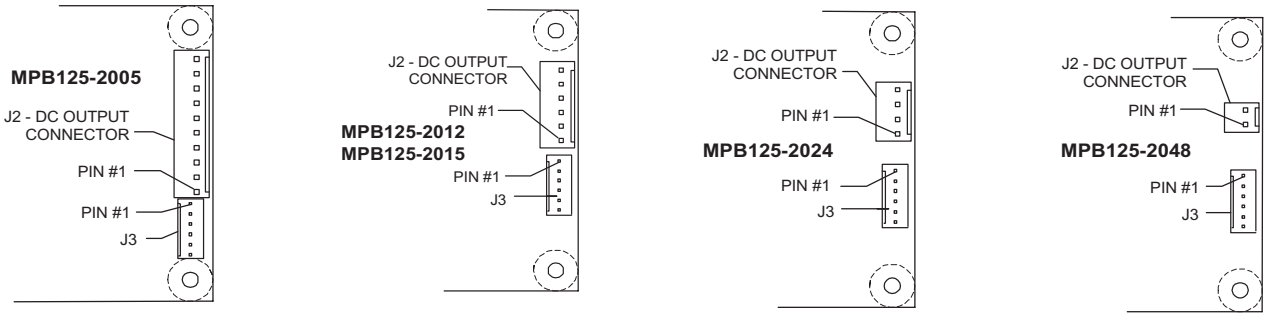
Pin 1	NEUTRAL
Pin 2	NO PIN
Pin 3	LINE

J2 -

	MPB125 -3000	MPB125 -4250	MPB125 -4350
Pin 1	-12V	-12V	-12V
Pin 2	+12V	+12V	+12V
Pin 3	N/C	+2.5V	+3.3V
Pin 4	N/C	+2.5V	+3.3V
Pin 5	N/C	+2.5V	+3.3V
Pin 6	RTN	RTN	RTN
Pin 7	RTN	RTN	RTN
Pin 8	RTN	RTN	RTN
Pin 9	RTN	RTN	RTN
Pin 10	RTN	RTN	RTN
Pin 11	+5V	+5V	+5V
Pin 12	+5V	+5V	+5V
Pin 13	+5V	+5V	+5V
Pin 14	+5V	+5V	+5V

J3 -

Pin 1	-SENSE
Pin 2	+SENSE
Pin 3	PWR GOOD



MATING CONNECTORS

NOTE: PART NUMBERS ARE MOLEX; EQUIVALENTS ARE ACCEPTABLE.

		MPB125 -2005	MPB125 -2012 -2015	MPB125 -2012 -2015	MPB125 -2024	MPB125 -2048	MPB125 -3000 -4250 -4350
J1	Housing	09-50-8033	09-50-8033	09-50-8033	09-50-8033	09-50-8033	09-50-8033
	Pins	08-52-0113	08-52-0113	08-52-0113	08-52-0113	08-52-0113	08-52-0113
J2	Housing	09-50-8103	09-50-8063	09-50-8063	09-50-8043	09-50-8023	09-50-8143
	Pins	08-52-0113	08-52-0113	08-52-0113	08-52-0113	08-52-0113	08-52-0113
J3	Housing	22-01-3067	22-01-3067	22-01-3067	22-01-3067	22-01-3067	22-01-3037
	Pins	08-50-0114	08-50-0114	08-50-0114	08-50-0114	08-50-0114	08-50-0114